A Constraint-Based Ethical Derivation from the Structured Nature of Physical Reality

Abstract

This paper derives a complete ethical framework directly from the structural properties of physical reality, without importing external values, authority, or rights. Reality is constrained and produces non-equivalent outcomes: some actions enable systems to persist and function, while others cause irreversible degradation. Any system capable of action must therefore select among these outcomes. Arbitrary selection treats non-equivalent outcomes as equivalent, creating a structural self-contradiction for the acting system itself. Justification is thus required, and the only non-arbitrary grounding available within a constrained system is necessity.

The traditional is/ought gap arises only if one presupposes that an agent can stand outside the causal structure of reality. This presupposition lacks grounding in physics, biology, or neuroscience: agency is an emergent property of embedded systems, not a separable observer. Once agent separability is rejected, the gap does not arise and requires no bridging. Ethics therefore emerges not as an imposed system of values, but as the structural requirement for non-arbitrary action within reality itself.

The derivation proceeds as a single, unbroken chain from observable physical constraints to the conditions of justified action. No value premises are introduced. The chain either holds or it does not.

Preface

This paper does not argue within existing ethical frameworks. Instead, it examines them at the level of their founding premises. Where those premises are shown to be underived—imported without grounding from theological, intuitive, or other external sources—the frameworks built upon them are not refuted in the usual sense. They simply become unnecessary. This is a more fundamental move than refutation.

The paper’ s central claim is that no such ungrounded premises are required. Ethics can be derived entirely from the structure of physical reality: non-equivalent outcomes under constraint, the unavoidability of selection, and the embedded nature of agency.

Several traditional philosophical problems appear unaddressed because they do not arise once their founding premises are removed. The is/ought gap is the clearest example. It depends on the assumption that agents are separable from the system they act within—an assumption that has no support in our best understanding of causal closure, conservation laws, biology, or neuroscience. Once this separability is rejected, the gap dissolves without further work. Attempts to reconstruct the gap inevitably reintroduce the same unsupported premise.

Readers who wish to appeal to inherent authority, hierarchy, species-based status, or self-evident rights must first provide grounding for those concepts from the structure of reality. Assertions without such grounding do not engage the argument; they illustrate the very point being made.

The derivation itself is presented as a single continuous chain, beginning from the observable structure of physical reality and leading to the conditions under which action is justified. No step imports a value premise or assumes what it sets out to derive. The chain either holds in full or it does not. The appropriate

response is therefore not to defend alternative frameworks, but to identify—if possible—where the chain breaks.`

1. Introduction

Ethical systems have historically been grounded in external authority, human-centered values, or assumed intrinsic meaning. When such foundations are rejected, ethical thought often collapses into nihilism — the position that nothing has value or meaning.

Both positions share a common assumption: that meaning or ethical significance must be supplied externally or imposed onto reality.

This paper rejects that assumption. It begins from a different premise:

> Reality is structured, and action occurs within that structure.

The argument proceeds by examining the implications of acting within a system where outcomes are not equivalent and where no agent possesses inherent authority. Each step follows from the previous without importing external premises. The derivation does not assert that ethics matters and then derive conditions from that assertion — it shows that the structure of reality itself generates the conditions under which ethical grounding is required.

2. The Structured Nature of Reality

Observation shows that reality is not arbitrary:

- actions produce different outcomes
- systems persist or degrade depending on interaction
- energy and capacity are finite
- processes are irreversible in practice

From this it follows:

> Outcomes in reality are non-equivalent.

Some actions lead to persistence, others to degradation. This is not a matter of interpretation but of structure. The non-equivalence of outcomes is the foundational observation from which everything else in this derivation is derived.

3. Non-Equivalence Forces Selection

In a system where outcomes are not equivalent, any system capable of action must select between possible outcomes. To act is to choose. To choose is to differentiate between non-equivalent outcomes.

Therefore:

> Selection is an unavoidable feature of acting within a structured reality.

A system that acts cannot avoid differentiating between outcomes — differentiation is what action is. If selection is unavoidable and outcomes are non-equivalent, then the basis on which selection occurs becomes structurally significant. Selection cannot be treated as a neutral event.

4. The Ungroundedness of Arbitrary Action

If selection were arbitrary, then non-equivalent outcomes would be treated as equivalent. This contradicts the structure established in Section 2.

Therefore:

> Selection cannot be arbitrary without contradicting the structure of reality.

Arbitrary action remains physically possible, but it is ungrounded relative to the structure that determines outcomes. A distinction must be drawn between selection and outcome. The justification requirement applies to deliberate selection — to action as a chosen differentiation between non-equivalent outcomes. A random action that produces harm still produces harm. Irreversibility does not care about intent. But the justification requirement attaches to the selection process itself, not merely to the outcome. Both dimensions carry structural weight: the selection because it is where grounding is required, the outcome because irreversibility makes its consequences permanent regardless of how they were arrived at.

If selection cannot be arbitrary, a non-arbitrary condition must distinguish one action from another. That condition is what this derivation defines as justification.

5. Justification as Non-Arbitrary Grounding

> **Justification** is the non-arbitrary condition that distinguishes one selection from another within a system where outcomes are non-equivalent.

Justification is not introduced as a moral concept but as a structural requirement: the grounding that makes action consistent with a non-equivalent system. Unjustified action is not equivalent to impermissible action. Unjustified means ungrounded relative to the structure of reality. A system can act in ways that are ungrounded. What the derivation establishes is not prohibition but the structural conditions under which grounding exists or does not.

The question that follows is: what generates the grounding requirement in the first place? The answer lies in what an agent is and what agency requires.

6. Agency as a Property of the System

The is/ought gap presupposes that agency is absolute and separate from the system. This presupposition is false. Once it is removed the gap does not require resolution — it does not arise.

This is not a metaphysical assertion. It is a physical fact. No system — whether a particle, an organism, or a human agent — operates outside the causal structure of reality. Conservation laws, causal closure, and the absence of any known mechanism for agency to stand apart from the system it operates within all point to the same conclusion: there is no external position from which to observe without participating, no separable self that exists independently of the constraints it is composed of. The agent is not a visitor to reality. It is reality, locally instantiated. To claim otherwise would require specifying the mechanism by which agency escapes physical constraint — a claim for which no evidence exists and for which no coherent account has ever been provided.

Physics establishes that there is no isolated system. Every system is embedded in fields, exchanges energy, and participates in interactions that blur boundaries. Conservation laws do not preserve selves — they preserve quantities that flow through and between systems. Quantum mechanics undermines classical locality entirely; entanglement shows that what we call separate particles are often not separate at all. Biology confirms that an organism is not a closed unit but a dynamic process of constant exchange — air, water, nutrients, microbes, information. The body contains more non-human cells than human cells. The microbiome is essential to function. There is no clear boundary where the organism ends and environment begins. Neuroscience finds no unified self located somewhere in the brain. What is experienced as a coherent self is a constructed narrative generated by distributed processes that have no central command. The self is a process, not a thing. Ecology shows that no organism persists without its ecosystem. The individual is an abstraction from a network of interdependencies.

Each of these converges on the same conclusion from a different direction. Agent separability is not a metaphysical position that requires philosophical refutation. It is a physical claim that has no evidential support and contradicts what is known across multiple independent fields of inquiry.

Agency is not a property that exists independently of the system in which it operates. It is an emergent property of sufficiently complex constrained systems operating within reality. An agent does not observe the system from outside and elect to participate. The agent is the system, locally instantiated — its selections are expressions of the structure, not departures from it.

Therefore the question "why ought an agent conform to reality's structure?" is incoherent as posed. It requires the agent to be separable from the system in order for the question to have purchase. No such separation exists. The agent cannot step outside the constraints it is composed of and ask whether to accept them. The constraints are constitutive of the agent itself.

> Agency is not independent of reality. It is an expression of reality operating under its own constraints.

The premise of absolute agent separability has theological origins — the soul standing apart from the material world — and persisted in secular philosophy long after the theology was abandoned. Once removed, the derivation of normative structure from physical constraint proceeds without requiring any additional normative premise.

Embeddedness alone, however, does not generate normative force. A river is embedded in physics. It flows according to physical constraint. We do not say the river ought to flow downhill — that is not a normative claim that follows from the river's embeddedness. The river does not recognize that outcomes

are non-equivalent. It has no model of what could happen versus what does happen. It simply flows according to forces acting upon it.

An agent capable of selection is categorically different. An agent is by definition a system that recognizes outcomes as non-equivalent and chooses between them. That recognition — the internal modeling of non-equivalent outcomes — is what distinguishes an agent from a river. It is precisely this capacity to recognize non-equivalence combined with the act of choosing between recognized non-equivalent outcomes that generates the grounding requirement.

A challenge to this position holds that representation of non-equivalence does not entail commitment to it. A system may model that outcomes differ and still select arbitrarily without internal contradiction — on the grounds that recognizing a difference and being bound by it are separable operations.

This challenge fails because it assumes that agency is a property a system possesses independently of its selections — that recognition and selection can operate without reference to each other. That assumption is not derived from physical structure. It is imported without grounding.

Within this derivation, agency is not a property held independently of selection. Agency is constituted by the process of recognizing non-equivalence and differentiating between outcomes. The two are not separable. A system that selects constitutes itself as an agent through that selection.

The contradiction in arbitrary selection is therefore not that the system becomes unstable or fails to function. It is that the system simultaneously constitutes itself as an agent — a recognizer of non-equivalence — through the act of selection, while negating the recognition that makes it an agent by treating non-equivalent outcomes as equivalent. This is self-negation at the level of what the system is, not external violation of an imposed standard.

This self-negation is not merely logical inconsistency. It is the agent acting against the capacity that constitutes it as an agent. Arbitrary selection does not simply produce a contradiction in the abstract — it degrades the structural precondition of the system's own agency. A system cannot coherently recognize non-equivalent outcomes, constitute itself as an agent through selection, and simultaneously treat its own constitutive capacity as structurally irrelevant without undermining the conditions of its own operation. This is the harm principle operating in its most fundamental form — not other-regarding but self-regarding. The grounding requirement is therefore not an external demand placed on the agent. It is what the agent already is, expressed as a structural condition of its own continued operation as an agent.

A committed refusal of this account is itself a selection between non-equivalent outcomes — which is precisely the operation the derivation identifies as constituting agency. The refusal does not escape the derivation. It confirms it. A system can choose to act without grounding. What it cannot do is make that choice without the choice itself being the kind of event the derivation describes. The derivation does not compel. It identifies. A system acting without grounding is accurately described as ungrounded, whether or not it accepts that description.

It follows that:

> The structural demand for justification is not imposed on the agent from outside. It is a feature of what the agent is — specifically, of its capacity to recognize and select between non-equivalent outcomes.

Selection is the threshold at which the justification requirement applies. A rock falling expresses the system causally. An agent selecting between non-equivalent outcomes does something categorically different — it differentiates, and differentiation is where grounding is required. Experience then modulates the burden of justification for what the selection acts upon.

This also resolves the apparent tension between necessity as a grounding condition and the full range of action a system expresses. Actions such as art, exploration, play, and preference-based choice are not departures from the system requiring independent justification. They are expressions of the system's complexity through a locally instantiated node. The laws that produce the agent are the same laws that produce these expressions. They are structurally continuous with what the agent is. They occupy a different category entirely from actions that irreversibly degrade the capacity of other systems, which is where necessity applies as a justificatory condition.

7. Capacity as Structural Precondition

The derivation defines harm as degradation of capacity and necessity as preventing greater degradation. A question arises: why does capacity matter structurally rather than being asserted as a value premise?

The answer is that capacity is not one property among others. It is the precondition for the derivation's own operation.

Without capacity there is no agent. Without an agent there is no recognition of non-equivalent outcomes. Without that recognition there is no selection. Without selection there is no grounding requirement. Without a grounding requirement the entire chain from which ethics emerges does not arise.

Capacity is therefore not imported as a value. It is the structural precondition that makes the derivation possible at all. An agent that recognizes non-equivalent outcomes is already implicitly committed to capacity mattering — because without capacity the recognition itself cannot occur. The agent cannot coherently operate the derivation while simultaneously treating capacity as structurally irrelevant. To do so would be to undermine the conditions of its own operation.

The alternatives to capacity as the foundational property — complexity, energy state, information processing rate — fail this test. They are properties a system may have without being preconditions for the recognition of non-equivalent outcomes. Capacity is the precondition. The derivation does not choose capacity as a value. It identifies capacity as what must exist for any agent to be running any derivation at all, including this one.

> Capacity is not a value premise introduced into the derivation. It is the structural precondition without which the derivation cannot run.

This closes the grounding gap. The derivation does not need to assert that capacity matters. It only needs to show that agency requires capacity — and that an agent already committed to recognizing non-equivalent outcomes is already committed to capacity mattering. Both are demonstrated structurally.

8. Absence of Inherent Authority and the Other-Regarding Gap

Establishing that capacity matters for the agent's own operation does not automatically establish that other systems' capacity matters. The question is whether the grounding requirement extends outward.

It does — and the answer is already contained in the absence of inherent authority.

No agent possesses unlimited capacity, universal control, or intrinsic entitlement. Therefore no system has default priority over any other. No action is justified by default. No system can claim inherent priority over another based on position, identity, or classification.

The question of why your capacity mattering commits you to other systems' capacity mattering appears to require an additional premise. It does not. Any claim that one system's capacity is categorically more significant than another's requires invoking inherent authority — the assertion that this system's capacity matters more simply because it is this system's capacity. That assertion is not structurally derivable. It is a preference dressed as a structural claim.

The distinction between self and other cannot itself ground differential treatment of capacity. Section 6 establishes that the boundary between agent and system is not ontologically real — the agent is reality locally instantiated, not a separate entity observing from outside. A grounding claim that treats self capacity as mattering while other capacity does not requires that boundary to be real. It is not. The self/other distinction is the same false separation that agent separability presupposes. An agent that accepts the falseness of separability while simultaneously treating the self/other boundary as grounds for differential concern has reimported the false premise through the back door. The absence of inherent authority and the falseness of separability together close this gap completely. There is no coherent position that accepts both and still limits concern to self capacity alone.

A further objection holds that even without inherent authority, the agent occupies a structurally special position — it is the point where selection happens. Does this positional fact generate an asymmetry in how capacity is treated in the grounding calculation?

It does not. The agent's position as the point of selection determines the mechanism through which grounding operates. It does not determine the grounding itself. Being the point where selection happens makes the agent's capacity the mechanism through which the necessity calculation runs — not a factor that weights the agent's capacity above others in that calculation. Position determines mechanism. It generates no grounding asymmetry because grounding is determined by the structure of reality which applies uniformly regardless of which system is the point of selection. The absence of inherent authority applies to the agent's position in the act of selection as much as anywhere else.

Since no inherent authority exists, and since capacity is the structural precondition for agency rather than a value premise, it follows that:

> Any system whose operation depends on capacity cannot coherently claim that its own capacity is categorically more significant than the capacity of other systems without invoking inherent authority the derivation has already rejected.

The other-regarding gap is not bridged by adding a new premise. It is closed by removing the false premise that created it. The commitment to one's own capacity, combined with the absence of any basis for hierarchical priority, generates the commitment to other systems' capacity as a structural consequence.

> All actions that degrade the capacity of other systems require justification.

9. Irreversibility and Consequence

Because physical processes are irreversible, actions produce permanent state changes and prior configurations cannot be restored.

> What is done cannot simply be undone.

This gives actions structural significance independent of any agent's preferences or intentions. The irreversibility of outcomes is what makes the justification requirement consequential rather than merely formal. An ungrounded action that produces no lasting change would be structurally trivial. An ungrounded action that permanently degrades a system's capacity is not. Irreversibility is the structural feature that makes the grounding requirement matter in practice — and it connects directly to what harm is.

10. Structural Definition of Harm

Given irreversibility, harm is defined as:

> **harm** = irreversible degradation of a system's capacity to persist or function.

This definition follows directly from the non-equivalence of outcomes and the distinction between persistence and degradation established in Section 2. Harm is not defined by feeling or preference but by structural loss of capacity. Harm is observable and measurable in structural terms. Psychological harm is not ephemeral — it is real, observable, and measurable as degradation of a system's functional capacity. That measurement may be imperfect in practice but the structural definition remains precise regardless of measurement limitations.

Note on commensurability: comparing the magnitude of harm across different systems — determining whether degradation to system X is equal to or greater than degradation to system Y — is a problem this derivation acknowledges without fully resolving. What the derivation establishes is the structure of the requirement: that such comparison is necessary for justification under necessity, and that it must be

made on the basis of structural capacity rather than species membership, preference, or assumed hierarchy.

The comparison is always between specific instances of irreversible capacity degradation produced by specific actions. It is never between the categorical value of the systems involved. The total capacity of a system does not determine the weight of its degradation in any comparison. Only the specific capacity irreversibly lost in the specific instance is relevant to the measurement. Properties of a system beyond the specific degradation — species, cognitive complexity, social relationships, or any other characteristic — do not enter the comparison and cannot be used to weight one system's degradation above another's. Any methodology that produces differential weighting based on properties of the system rather than properties of the specific degradation has smuggled hierarchy into the measurement and departed from the derivation's foundational claims. The comparison is narrow by design. That narrowness is not a limitation. It is the only position consistent with the absence of inherent authority.

11. Experiencing Systems and Epistemic Uncertainty

Some systems exhibit internal state variation consistent with experience — that is, with there being something it is like to be that system. The exact boundary of such systems is not fully known and may not be determinable with current tools.

Within this derivation, the structural significance of harming an experiencing system follows directly from the definition of harm as capacity degradation. If a system has the capacity for internal experience, that capacity is itself subject to irreversible degradation. Its destruction or suppression constitutes harm in the structural sense established in Section 10.

Epistemic uncertainty does not dissolve this. Where it is not known whether a system possesses internal experience, and where such possession is plausible given the system's observable properties, the burden of justification for actions that would degrade that system increases. This follows from the same structural logic: acting under uncertainty toward irreversible outcomes is not equivalent to acting with certainty. The irreversibility of potential harm does not wait for certainty to be established.

Plausibility is not arbitrary and does not extend uniformly to all physical systems. It is grounded in observable structural properties consistent with the capacity for internal state variation — specifically, evidence of responsiveness to environment, internal state complexity, and the kind of self-regulating behavior that capacity as defined in this derivation requires. A rock does not exhibit these properties. A mammal does. The boundary between them is not metaphysically precise but it is not arbitrary. Caution scales with the observable evidence for these structural properties in the specific system in question.

The derivation does not smuggle in hierarchy by treating complexity of experience as a basis for differential moral status. The appropriate response to uncertainty about the boundaries of experience is caution, not ranking. In practice it is impossible to avoid all harm to all plausible experiencing systems — an agent moving through the world will inevitably degrade some systems it cannot identify as experiencing. The derivation requires caution proportionate to the plausibility of experience and the availability of alternatives, not perfect avoidance which is structurally impossible.

This derivation acknowledges that a fully rigorous companion model of consciousness — one derived with the same structural precision as this ethical derivation — does not yet exist. Until such a model exists, caution under uncertainty is the only structurally consistent position.

> Uncertainty does not remove relevance; it increases responsibility under constraint.

12. Necessity as the Only Non-Arbitrary Grounding

The chain established so far shows that actions require grounding, that capacity is what grounding must protect, and that no system is exempt from the grounding requirement. What remains is to identify what grounding consists of — what makes an action that degrades another system's capacity justified rather than merely ungrounded.

The only available candidate within a constrained system is:

> **necessity**

Definition

> Necessity = an action required, under immediate and non-speculative constraints, to prevent equal or greater irreversible degradation, where no feasible lower-harm alternative exists and the causal link is direct.

Why Necessity and Not Other Candidates

Alternative groundings have been proposed — coherence, flourishing, relational obligation, aesthetic value. Each fails on structural grounds.

Coherence requires a standard to cohere to. That standard must itself be grounded, which reintroduces the grounding problem without resolving it.

Flourishing imports a value — that systems ought to flourish — without deriving that value from the structure of reality. It is an assumption dressed as a grounding.

Relational obligation imports inherent authority — the claim that relationships between systems generate obligations independently of constraint. But no system possesses inherent authority. Relational obligation cannot be grounded without it.

Aesthetic value is a preference-based grounding. Preferences are not structurally derived and vary arbitrarily between systems. They cannot provide non-arbitrary grounding.

Necessity alone is grounded in constraint, non-arbitrary, and structurally determined. It does not rely on preference, authority, or assumption.

> Necessity is the only valid form of justification available within a constrained system for actions that degrade the capacity of other systems.

Scope of Necessity

Necessity as a justificatory condition applies specifically to actions that impose irreversible degradation on other systems. It is not a totalizing constraint on all action. A system expressing its own nature within the structure — through exploration, creation, or preference — is not in the same category as a system degrading another. The former is the system being what it is. The latter requires grounding because it imposes permanent structural change on something outside the acting system's own expression.

The necessity criterion is strict by design. Actions that degrade other systems' capacity for reasons of convenience, preference, or assumed hierarchy do not satisfy it. This is not a flaw in the derivation — it is the derivation working correctly. The gap between how agents currently act and what the necessity criterion permits is not a reductio of the derivation. It is the derivation's indictment of how agents currently act.

Necessity Assessment and Capacity to Reason

The necessity assessment — determining whether an action satisfies the conditions of necessity before it is taken — falls on the system taking the action. This follows directly from the asymmetry of capacity established in Section 13. A system with greater capacity to reason has greater obligation to apply that reasoning rigorously before acting.

Animals acting from constraint and instinct without arbitrary positions or constructed frameworks are in a meaningful sense closer to the structural ideal this derivation describes than humans typically are. They act from genuine constraint — survival, immediate necessity — without ideological rationalization or fictitious hierarchy. There is documented evidence of behavior in animals consistent with moral constraint: responses to fairness, mourning, protection of other species. This is not surprising under this derivation. Ethics emerges from structural constraints governing all systems. Systems operating directly from those constraints without the overlay of constructed frameworks will naturally behave in ways consistent with them.

What human cognitive capacity adds is not moral superiority but the ability to construct elaborate rationalizations for unjustified actions — to dress arbitrary preference as grounded necessity using fictitious constructs. It also adds the capacity to reason rigorously about necessity before acting. That capacity generates obligation. A system that can perform the necessity assessment and does not is acting with less grounding than a system that cannot perform it at all.

> Increased capacity to reason generates increased obligation to reason rigorously before acting.

13. The Rejection of Rights as a Fictitious Construct

Rights-based ethical frameworks assert that certain entitlements attach to agents by virtue of their nature or membership in a category. These frameworks historically derived their force from theological

grounding: rights existed because a divine authority granted them.

As theological grounding eroded under scientific observation, rights frameworks did not follow the logic of their own premises. Instead they retained the structure of rights while abandoning the only foundation that had given that structure coherence. Rights became self-evident, foundational, inalienable — without any account of what makes them so or what grants them in the absence of a grantor.

Rights are not derivable from the structure of reality without importing the grounding that has been removed. They cannot be derived from observable constraint. They are not grounded in necessity. They are a fictitious construct that persisted after its original foundation was removed. That a concept is widely held or institutionally embedded does not constitute derivation. The standard this derivation applies is consistent throughout: a concept is real in the relevant sense if and only if it can be derived from the structure of reality without importing ungrounded premises. Rights fail that standard. Their failure is not that they are invisible or intangible — it is that no derivation exists that does not smuggle in the theological or authoritative grounding the derivation has already shown to be without foundation.

It has been suggested that rights function as compression mechanisms — heuristics for managing large-scale necessity calculations under uncertainty. This is acknowledged. However, instrumentally useful shortcuts for approximating necessity are not rights in any ontologically meaningful sense. They are practical tools that derive whatever force they have from the underlying structural derivation, not from any inherent feature of reality. Naming them rights imports the fictitious construct without justification.

This derivation replaces rights entirely with capacity — the structurally real property of systems to persist, function, and where applicable, to experience. Capacity is derivable from the structure of reality as the precondition for agency itself as established in Section 7. Its degradation is measurable in structural terms. The obligation to justify actions that degrade capacity follows from the derivation without requiring any fictitious construct.

> What a system has is not rights. What a system has is capacity. Capacity is what the structure of reality makes relevant.

14. Rejection of Anthropocentric Priority

Because no inherent authority exists and justification must be grounded in constraint, there is no basis for human-centered priority.

Humans are constrained systems among other systems, operating under the same structure. Human cognitive capacity does not imply privilege. Any prioritization of humans over other systems must itself be justified under necessity.

The assumption that humans occupy a central or superior position in reality is a premise, not a conclusion. It has never been derived from the structure of reality. This derivation does not grant it. Every ethical system that assumes human centrality without deriving it is operating on an unsupported premise that contaminates every conclusion built on top of it.

15. Asymmetry of Capacity

When one system has greater control over another, the burden of justification increases. Capacity does not grant entitlement; it increases responsibility.

> Greater capacity over a system generates greater obligation to justify action toward that system.

This follows directly from the grounding requirement and the absence of inherent authority. A system with greater capacity over another is not exempt from justification — it is more deeply subject to it.

16. Conflict and Tragic Outcomes

In cases where multiple systems satisfy necessity and conflict cannot be resolved, harm may remain unavoidable. This does not invalidate the derivation but reflects the constraints of reality.

The derivation does not promise that ethics resolves all conflicts without remainder. It establishes the structural conditions under which action is grounded or ungrounded. Tragic outcomes are those in which grounded action still produces irreversible harm — a consequence of operating within a constrained system, not a failure of the derivation. Reality does not guarantee that necessity produces clean solutions. It only establishes that necessity is the only grounding available.

17. Conclusion

The chain established in this paper moves without interruption from the structure of physical reality to the structural conditions of ethical action. No step imports a value premise. No step assumes what it is trying to derive.

Reality is structured. Outcomes are non-equivalent. Action requires selection. Selection cannot be arbitrary without self-negation at the level of what an agent is. Justification is therefore required. Capacity is the structural precondition for agency — not a value premise but the condition without which no agent runs any framework at all. The absence of inherent authority means no system can coherently claim its capacity is categorically more significant than another's. Harm is irreversible degradation of capacity — observable, measurable, structurally real. Necessity is the only non-arbitrary grounding for actions that degrade other systems. Rights are a fictitious construct; capacity is what the structure of reality makes relevant. Anthropocentric priority is an unsupported premise, not a derived conclusion. Greater capacity generates greater obligation, not greater entitlement. Tragic outcomes are real but do not invalidate the derivation — they reflect the constraints of the system in which action occurs.

Therefore:

> **Ethics emerges as a structural requirement of acting within a constrained, non-equivalent reality.**

Final Statement

> **Ethics is not imposed onto reality, nor derived from human-centered assumptions. It arises from the requirement that action be grounded in the structure of reality itself.**

Frameworks that assume inherent authority, human centrality, fictitious constructs such as rights, or absolute agent separability from the system depart from this structure and require unsupported premises. The derivation presented here requires none. It begins where observation begins — with the structure of reality — and follows the chain to where it leads.